

MULTIMEDIA



UNIVERSITY

STUDENT IDENTIFICATION NO

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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2016/2017

BKC3034 – BUSINESS SYSTEM ANALYSIS AND DESIGN

(All sections / Groups)

2 MARCH 2017
2.30 p.m. - 4.30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of 4 pages (including cover page) with **TWO** sections only.
2. Answer **ALL** questions in Section A, and **THREE (3)** out of **FOUR (4)** questions in Section B. The distribution of the marks for each question is given.
3. Please write all your answers in the answer script provided.

SECTION A: CASE STUDY (25 marks)**Answer ALL questions****The Real Estate Multiple Listing Service (MLS) system**

The Real Estate Multiple Listing Service (MLS) system supplies information that local real estate agents use to help them sell houses to their customers. During the month, agents list houses for sale (listings) by contracting with homeowners. The agent works for a real estate office, which sends information on the listing to the multiple listing service. Therefore, any agent in the community can get information on the listing.

Information on a listing includes the address, year built, square feet, number of bedrooms, number of bathrooms, owner name, owner phone number, asking price, and status code. At any time during the month, an agent might directly request information on listings that match customer requirements, so the agent contacts the multiple listing service with the request. Information is provided on the house, on the agent who listed the house and on the real estate office for which the agent works. For example, an agent might want to call the listing agent to ask additional questions or call the homeowner directly to make an appointment to show the house. Twice each month (on the 15th and 30th), the multiple listing service produces a listing book that contains information on all listings. These books are sent to all the real estate agents. Many real estate agents want the books (which are easier to flip through), so they are provided even though the information is often out of date. Sometimes agents and owners decide to change information about a listing such as reducing the price, correcting previous information on the house, or indicating that the house is sold. The real estate office sends in these change requests to the multiple listing service when the agent asks the office to do so.

(Adapted from: J. Satzinger, R. Jackson, & S. Burd, *Systems Analysis & Design in a Changing World*, 6th ed., 2012.)

QUESTION 1

- a. Create a complete event table listing the event, trigger, source, response, and destination for each event. (8 marks)
- b. Draw and explain a domain model class diagram that corresponds to the ERD (entity-relationship diagram) but shows that different types of listing have different attributes. (10 marks)
- c. Create a fully developed use case description for the use case 'add agent to the real estate office' by the actor (i.e. clerk). (7 marks)

(Total: 25 marks)

Continued.....

SECTION B (75 marks)**Answer THREE (3) out of FOUR (4) questions****QUESTION 2**

- a. Discuss the differences between the predictive approach and adaptive approach. In your opinion, which approach is the best to follow? Justify your answer. (10 marks)
- b. Assume you have developed a new information system. You are now required to provide support for the new system. Describe the objective of support phase and **THREE (3)** major activities involve during support phase. (8 marks)
- c. In developing a system, why would a system analyst prefer Agile development? Describe **FOUR (4)** values of Agile development. (7 marks)
- (Total: 25 marks)

QUESTION 3

- a. Describe **FIVE (5)** activities of system analysis. (10 marks)
- b. List and briefly describe **THREE (3)** information gathering technique. (6 marks)
- c. Describe the purpose of activity diagram. Draw an activity diagram based on the following narrative.

The facilities and management department (FMD) of multimedia university (MMU) handles purchase requests from other departments in the university. Those who initiate the original purchase request are the "employees" of FMD. A case worker within the FMD department receives the request and monitors it until it is ordered and received. Case workers process requests for the purchase of products under RM2,000, write a purchase order, and then send it to the approved vendor. Purchase requests over RM2,000 must first be sent out for bid from the vendor that supplies the product. When the bids return, the case worker selects one bid and then writes a purchase order and sends it out.

(9 marks)

(Total: 25 marks)

Continued.....

QUESTION 4

- a. Describe the differences between general requirements, technical requirements, and functional requirements.

(10 marks)

- b. Assume you are asked to draw a data flow diagram (DFD) for scheduling courses. What are **FIVE (5)** guidelines you should follow to draw DFD for scheduling courses?

(10 marks)

- c. Draw **TWO (2)** data flow diagram (DFD) fragments for the course registration system using external agent, process, data flow and data storage.

(5 marks)

(Total: 25 marks)

QUESTION 5

- a. There are different types of tests that one should do in SDLC activities. Describe the terms 'unit test', 'integration test', 'system test', and 'user acceptance test'. During which SDLC activity is each test type performed?

(8 marks)

- b. What are the activities involved in implementation and deployment phases of SDLC?

(10 marks)

- c. Explain what SAAS is and why it is an economically attractive alternative.

(7 marks)

(Total: 25 marks)

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